



Dear Parents,

Over the next several weeks, we will be learning about **addition** in math! The information below will help you to support your child as they learn these exciting, yet important first grade math skills.

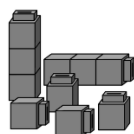
The GOAL:

By the end of the unit, your child should **understand the concept of addition** and be able to **solve addition problems**.

Help your child represent addition:

You can use a variety of tools to help practice addition.

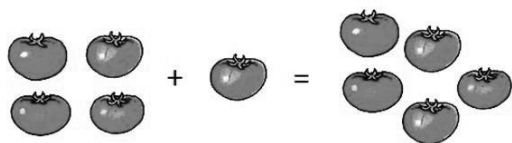
Connecting Cubes



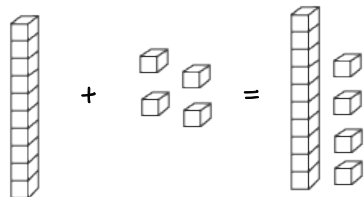
Counters



Pictures



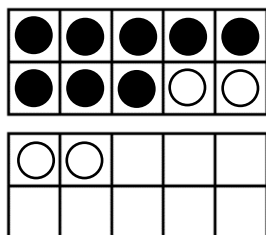
Base Ten Blocks



$$10 + 4 = 14$$

Making a Ten

$$\begin{array}{r} 8 \\ + 4 \\ \hline 12 \end{array}$$



8 + 4 is the same as 10 + 2

Help your child learn how to add:

Counting On:

Add 2:



9



10



11

$9 + 2 = \underline{\quad}$

Add using three addends:

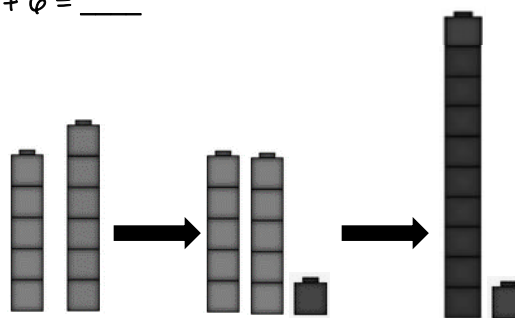
$3 + 7 + 2 = \underline{\quad}$



$10 + 2 = 12$

Doubles Plus 1: Use doubles plus 1 to find:

$5 + 6 = \underline{\quad}$



$5 + 6 = 5 + 5 + 1 = 10 + 1 = 11$

So, $5 + 6 = 11$



Properties of Addition

Commutative Property of Addition states the order of addends does not matter.

$$7 + 8 = 15$$

is the same as

$$8 + 7 = 15$$

Associate Property of Addition states you can group addends in any order. This property is used when there are three or more addends.

$$(2 + 3) + 4 = 9$$

$$2 + (3 + 4) = 9$$

$$(2 + 4) + 3 = 9$$

(This example uses the Commutative Property first to change the order of the addends.)

Identify Property of Addition states that any addend plus zero will equal the same number. The number will keep its identity.

$$12 + 0 = 12$$

Grade 1 Math: **PA Core Math Standards** in Unit 2

CC.2.2.1.A.1: Represent and solve problems involving addition and subtraction within 20.

CC.2.2.1.A.2: Understand and apply properties of operations and their relationship between addition and subtraction.

CC.2.1.1.B.3: Use place-value concepts and properties of operations to add and subtract within 100.

-- HOW TO HELP AT HOME --

- If you are at the store, count different quantities and determine which is more or less.
- Help your child look through magazines, old books, or newspapers for numbers and cut them out. Work together to create a word problem using some of the numbers and glue the numbers in place. Use one of the above addition strategies to solve the problem.
- When going for a walk, drive, or playing at home, pose simple addition problems or stories for your child to solve.
- Use dice to practice addition facts.
- Use objects, toys, items, etc., to practice addition at home.

-- KEY MATH VOCABULARY --

Addend: a number that is added to another number.

Addition Sentence: a mathematical expression that includes two or more addends and a sum.

Sum: the answer to an **addition** problem.